



## ATTACHMENT A

### Amendments to the Claims

*Following herewith is a complete listing of the claims, including a marked copy of the currently amended claims.*

1-45. (Canceled)

46. (New) A monoclonal antibody which binds to an epitope that is recognized by a monoclonal antibody selected from the group consisting of monoclonal antibodies 12-9, 13-2, 35-220 and 35-006.

47. (New) The antibody according to Claim 46 wherein said antibody recognizes a protein selected from the group consisting of *S. aureus* Clf40 protein, the *S. aureus* Clf33 protein, and the *S. aureus* ClfA N3 protein.

48. (New) The antibody according to Claim 46, wherein said antibody treats or prevents *S. aureus* infection in a human or animal.

49. (New) The antibody according to Claim 46, wherein said antibody inhibits binding of staphylococcal bacteria to fibrinogen or fibrin.

50. (New) The antibody according to Claim 46, wherein said antibody is suitable for parenteral, oral, intranasal, subcutaneous, aerosolized or intravenous administration in a human or animal.

51. (New) The antibody according to Claim 46 wherein the monoclonal antibody is of a type selected from the group consisting of murine, chimeric, humanized and human monoclonal antibodies.

52. (New) The antibody according to Claim 46 wherein the antibody is a single chain monoclonal antibody.

53. (New) The antibody according to Claim 46 that is raised against a protein having an amino acid sequence selected from the group consisting of SEQ ID NO:2 and SEQ ID NO:4.
54. (New) The antibody according to Claim 53 wherein the protein has an amino acid sequence encoded by a nucleic acid sequence according to SEQ ID NO:1 or SEQ ID NO:3, or degenerates thereof.
55. (New) The antibody according to Claim 46 having a variable light chain selected from the group consisting of SEQ ID NO:6, SEQ ID NO:10, SEQ ID NO:14 and SEQ ID NO:18.
56. (New) The antibody according to Claim 46 having a variable heavy chain selected from the group consisting of SEQ ID NO:8, SEQ ID NO:12, SEQ ID NO:16, and SEQ ID NO:20.
57. (New) The antibody according to Claim 46 having a variable light sequence encoded by a nucleic acid sequence according to a sequence selected from the group consisting of SEQ ID NO:5, SEQ ID NO:9, SEQ ID NO:13, SEQ ID NO:17, and degenerates thereof.
58. (New) The antibody according to Claim 46 having a variable heavy chain encoded by a nucleic acid having a sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:11, SEQ ID NO:15, SEQ ID NO:19, and degenerates thereof.
59. (New) Isolated antisera containing an antibody according to Claim 46.
60. (New) A diagnostic kit comprising an antibody according to Claim 46 and means for detecting binding by that antibody.

61. (New) The diagnostic kit according to Claim 60 wherein said means for detecting binding comprises a detectable label that is linked to said antibody.
62. (New) A method of diagnosing an infection of *S. aureus* comprising adding an antibody according to Claim 46 to a sample suspected of being infected with *S. aureus*, and determining if antibodies have bound to the sample.
63. (New) A pharmaceutical composition for treating or preventing an infection of *S. aureus* comprising an effective amount of the antibody of Claim 46 and a pharmaceutically acceptable vehicle, carrier or excipient.
64. (New) A method of treating or preventing an infection of *S. aureus* comprising administering to a human or animal patient an effective amount of an antibody according to Claim 46.
65. (New) A method of making the monoclonal antibody of Claim 46 comprising raising a hybridoma against an isolated protein selected from the group consisting of *S. aureus* Clf40, Clf33 and ClfA N3.
66. (New) The antibody according to Claim 46 that has the ability to bind to the amino acid sequence of SEQ ID NO:2.
67. (New) The antibody according to Claim 46 that has the ability to bind to an amino acid sequence coded by the nucleic acid sequence of SEQ ID NO:1 or degenerates thereof.
68. (New) The antibody according to Claim 46 further comprising a physiologically acceptable antibiotic.

69. (New) The antibody according to Claim 46 that is cross-reactive to multiple strains of *S. aureus*.
70. (New) The antibody according to Claim 46 which recognizes the A domain of *S. aureus* ClfA protein.
71. (New) The antibody according to Claim 46 having a variable light chain having the amino acid sequence SEQ ID NO:6 and a variable heavy chain having the amino acid sequence SEQ ID NO:8.
72. (New) The antibody according to Claim 46 having a variable light sequence encoded by a nucleic acid sequence having the sequence SEQ ID NO:5, or degenerates thereof, and a variable heavy chain encoded by a nucleic acid having the sequence SEQ ID NO:7, or degenerates thereof.
73. (New) The antibody according to Claim 46 having a variable light chain having the amino acid sequence SEQ ID NO:10 and a variable heavy chain having the amino acid sequence SEQ ID NO:12.
74. (New) The antibody according to Claim 46 having a variable light sequence encoded by a nucleic acid sequence having the sequence SEQ ID NO:9, or degenerates thereof, and a variable heavy chain encoded by a nucleic acid having the sequence SEQ ID NO:11, or degenerates thereof.
75. (New) The antibody according to Claim 46 having a variable light chain having the amino acid sequence SEQ ID NO:14 and a variable heavy chain having the amino acid sequence SEQ ID NO:16.

76. (New) The antibody according to Claim 46 having a variable light sequence encoded by a nucleic acid sequence having the sequence SEQ ID NO:13, or degenerates thereof, and a variable heavy chain encoded by a nucleic acid having the sequence SEQ ID NO:15, or degenerates thereof.

77. (New) The antibody according to Claim 46 having a variable light chain having the amino acid sequence SEQ ID NO:22 and a variable heavy chain having the amino acid sequence SEQ ID NO:24.

78. (New) The antibody according to Claim 46 having a variable light sequence encoded by a nucleic acid sequence having the sequence SEQ ID NO:21, or degenerates thereof, and a variable heavy chain encoded by a nucleic acid having the sequence SEQ ID NO:23, or degenerates thereof.